



# GRAIN TRANSPORTATION REPORT

Transportation & Marketing, Agricultural Marketing Service  
United States Department of Agriculture

JULY 10, 2003

<u>TM GRAIN TRANSPORT COST</u> <u>INDICATORS</u>	<u>Ocean</u>				
	<u>Truck</u>	<u>Rail</u>	<u>Barge</u>	<u>Gulf</u>	<u>PNW</u>
Indicator Value* for 07/10	96	122	87	140	166
Compared to Last Week	↑	↑	↓	↑	↑
*Indicator: Base Year 2000=100; Weekly Updates include Truck=Diesel; Rail=Nearby Secondary Rail Market; Barge=Spot Illinois River Basis; Ocean Vessel based on Routes to Japan					

July 13-18	28 <sup>th</sup> Annual Summer Ports, Waterways, Freight And International Trade Conference	Portland, Oregon	Joedy Cambridge 202-334-2000 <a href="mailto:jcambridge@ngs.edu">jcambridge@ngs.edu</a>
July 20-22	U.S. Grains Council, 43 <sup>rd</sup> Annual Board of Directors Meeting; 4 <sup>th</sup> International Grain Marketing Conference And Trade Show	Minneapolis, MN	202-789-0789 (ph) 202-898-0522 (fax) <a href="mailto:grains@grains.org">grains@grains.org</a>
July 27-30	America Agricultural Economics Association Annual Meeting	Montreal, Quebec Canada	515-233-3202
Sept. 10-12	Greater New Orleans Barge Fleeting Assoc. 2003 River & Marine Industry Seminar	New Orleans, LA	Alan Savoie 985-783-6605 (ph) <a href="http://www.gnobfar.com">www.gnobfar.com</a>
Sept. 24-26	National Waterways Conference Annual Meeting	Houston, TX	202-296-4415 (ph) 202-835-3861
Sept. 28-Oct. 3	2003 American Association of Port Authorities (AAPA) Annual Convention	Curacao, Netherlands Antilles	703-684-5700 (ph) 703-684-6321 <a href="mailto:info@aapa.ports.org">info@aapa.ports.org</a>
Oct. 18-21	National Assoc. Of Wheat Growers (NAWG) Fall Board Meeting	Minneapolis, MN	202-547-7800 (ph) 202-546-2638 (fax) <a href="mailto:wheatworld@wheatworld.org">wheatworld@wheatworld.org</a>
Oct. 19-22	American Trucking Association (ATA) Mgmt. Conference & Exhibition	San Antonio, TX	888-333-1759 (ph) 703-838-1700 (fax)

**Grain Transportation Report Ends Hard Copy.** With alternate means of disseminating news and data, this will be the final hard copy issue of this report. Through our website ([www.ams.usda.gov/tmd/grain.htm](http://www.ams.usda.gov/tmd/grain.htm)) and electronic mailing, we will be able to provide information more quickly and effectively. Please contact us if you decide you would like to be included on our e-mail list ([karl.hacker@usda.gov](mailto:karl.hacker@usda.gov))

Report is prepared by Deen Olowolayemo, Johnny Hill and Karl Hacker, Agricultural Economists, Transportation & Marketing, Agricultural Marketing Service, USDA (202) 690-1304. Support provided by Upper Great Plains Transportation Institute, North Dakota State University. This report can be found on the Internet at [www.ams.usda.gov/tmd/grain.htm](http://www.ams.usda.gov/tmd/grain.htm). E-mail [comments\\_and\\_questions@Surajudeen.Olowolayemo@usda.gov](mailto:comments_and_questions@Surajudeen.Olowolayemo@usda.gov)

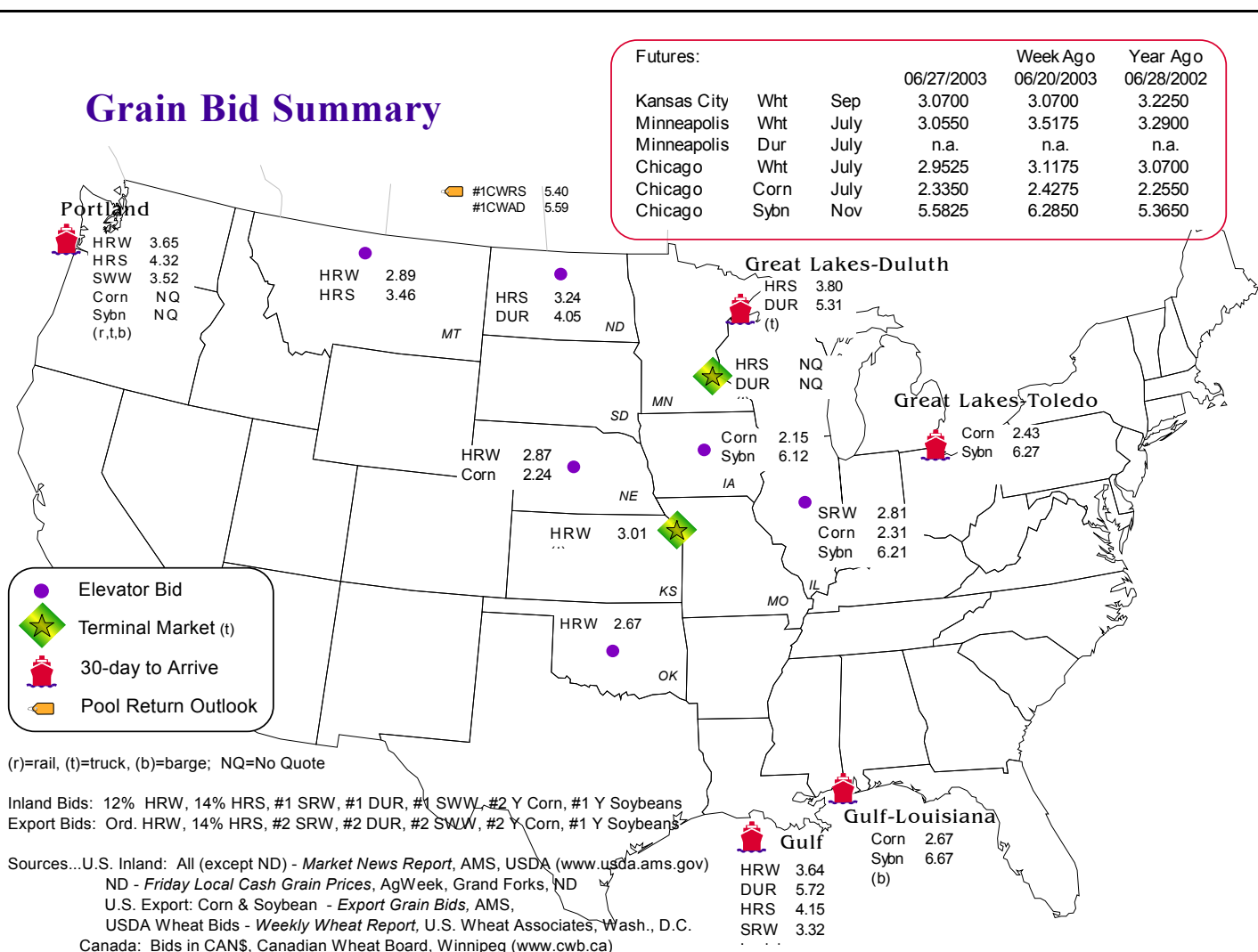
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The Grain Transportation Report is a weekly news source for grain logistics. Detailed data and trend information on five major modes: barge, truck, rail, container, and vessel, provide timely insight into grain transport. The report is offered to policymakers and industry as a tool in day-to-day decision making and longer-term strategic planning for an effective and efficient U.S. grain logistics system.

<u>Commodity</u>	<u>Origin--Destination</u>	<u>This week</u>	<u>Last week</u>
Corn	IL -- Gulf	-0.36	-0.37
Corn	NE -- Gulf	-0.43	-0.44
Soybean	IA -- Gulf	-0.55	-0.49
HRW	KS -- Gulf	-0.63	-0.46
HRS	ND -- Portland	-1.08	-1.06

## Grain Bid Summary



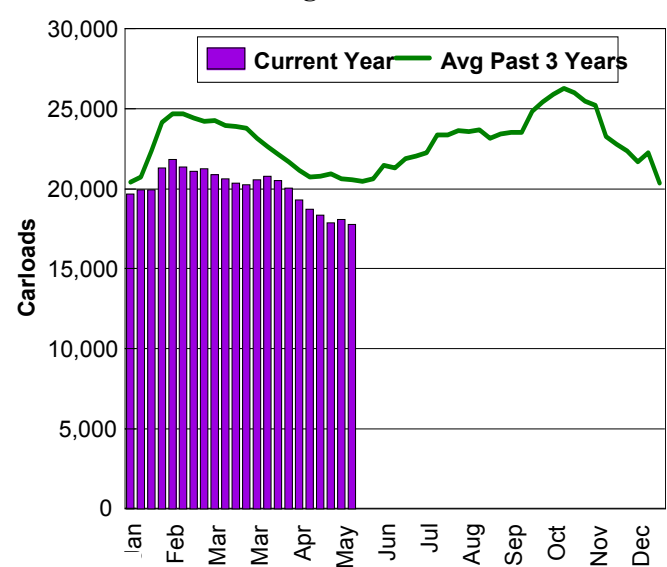
# RAIL TRANSPORTATION

## Rail Deliveries to Port (Carloads)

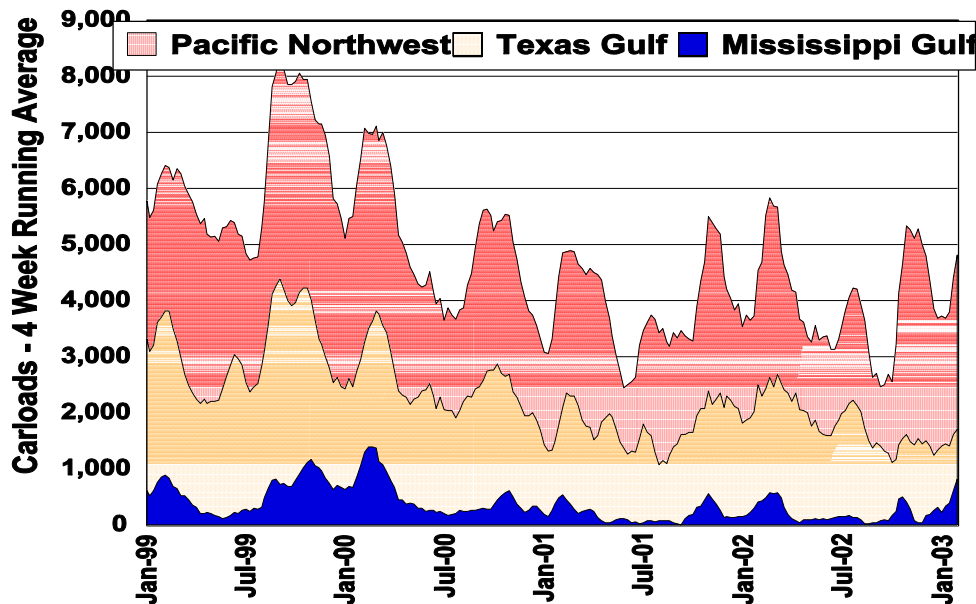
	Mississippi Gulf*	Texas Gulf	Pacific Northwest	Atlantic & East Gulf	Total
Week Ending:					
06/18/03	480	1,723	1,879	146	4,228
06/25/03	14	2,230	2,159	512	4,915
YTD 2003	8,900	31,896	75,120	10,055	125,971
YTD 2002	6,505	50,411	52,906	13,289	123,111
% YTD 2002	137%	63%	142%	76%	102%
Total 2002	11,112	83,799	111,719	21,551	228,181
Total 2001	10,022	81,804	111,376	26,604	229,806

Source: Transportation & Marketing/AMS/USDA; (\*) Incomplete Data

## Grain Car Loadings for Class I Railroads



## Rail Deliveries to Port



Railroads originate approximately 40% of U.S. grain shipments. Trends in these loadings are indicative of market conditions and expectations.

## Class I Rail Carrier Grain Car Bulletin (Grain Carloads Originated and Grain Service Index)

	East			West			Canada	
	CSXT	NS		BNSF	KCS		CN	CP
06/28/03	2,568	3,038	6,771	563	6,206	19,146	3,418	4,124
This Week Last Year	2,579	2,880	7,074	584	6,738	19,855	3,806	4,082
2003 YTD	71,922	83,036	185,850	8,778	166,530	516,116	87,010	88,836
2002 YTD	73,704	80,993	187,743	15,006	172,572	66,390	105,869	93,010
% of Last Year	98%	103%	99%	58%	96%	777%	82%	96%
2002 Total	142,760	164,745	400,179	27,161	344,296	1,079,141	191,835	195,765

## U.S. Rail Covered Hopper Cars Online Index\*

June-03	94.1	96.1	91.0	88.5	91.3	92.5
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Source: Association of American Railroads; \*Base Year =2001, Index based on Number of Covered Hopper Cars Online (available for Service).

Rail service may be ordered directly from the railroad via **Auction** for guaranteed service or tariff for non-guaranteed service, or through the secondary market. The **Secondary Rail Market** information reflects trade values for service that was originally purchased from the railroad carrier as some form of guaranteed freight. The auction and secondary rail values are indicators of rail service quality and demand/supply.

### Secondary Rail Car Market

Average Premium/Discount to Tariff, \$/Car - Last Week

	Delivery Period			
	Jul-03	Aug-03	Sep-03	Oct-03
BNSF-GF	\$40	\$46	\$48	\$47
UP-Pool	\$14	\$25	\$24	\$32

### Railroad Car 'Auction' Results

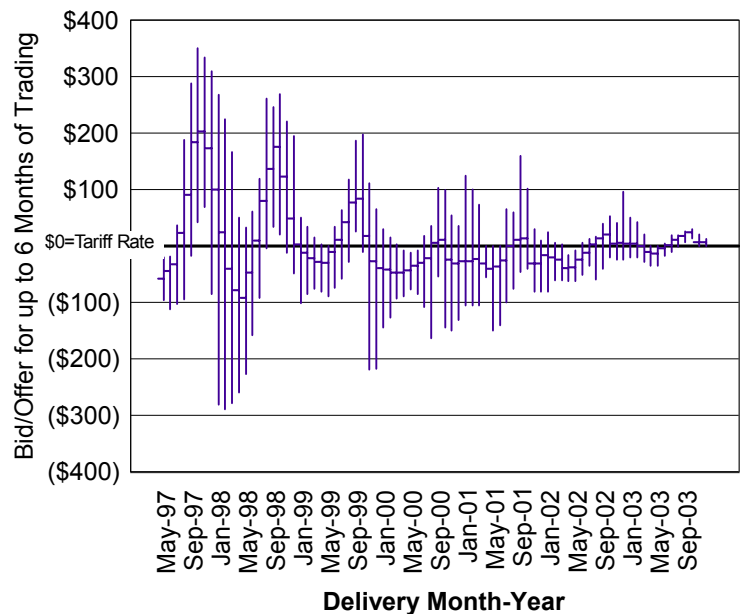
Average Premium/Discount to Tariff, \$/Car - Last Auction

Delivery for:	Aug-03	Sep-03	Oct-03
COT/N. Grain	\$43	\$48	\$29
COT/S. Grain	\$0	\$0	\$9
GCAS/Region 1	\$1	no bid	\$1
GCAS/Region 2	\$1	\$1	\$3

Source: Transportation & Marketing/AMS/USDA.

COT=Certificate of Transportation; GCAS=Grain Car Allocation System

### Secondary Rail Market Bid



### Tariff Rail Rates for Unit Train Shipments

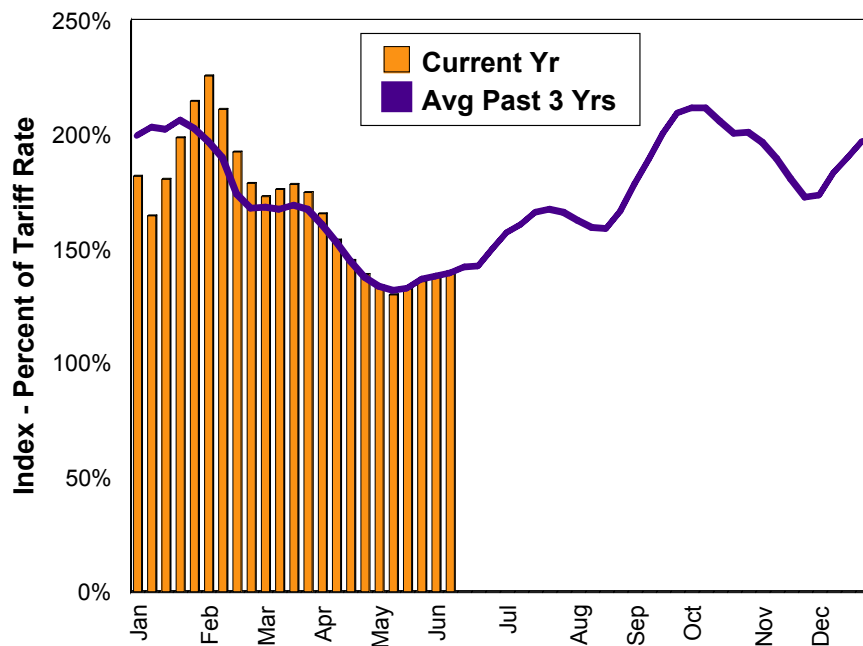
June 2003

Source: [www.bnsf.com](http://www.bnsf.com), approximate load per car = 100 tons: Corn 56 lbs/bu, Wheat & Soybeans 60 lbs/bu\*

Date Effective	Tariff Item	Commodity	Origin	Destination	Rate Per Car	Rate Per MT	Rate/Per Bushel*
06/02/03	113710	Wheat	Kansas City, MO	Galveston, TX	\$1,720	\$18.96	\$0.52
06/02/03	43521	Wheat	Minneapolis, MN	Portland, OR	\$4,148	\$45.72	\$1.24
06/02/03	46540	Wheat	St. Louis, MO	Houston, TX	\$1,795	\$19.79	\$0.54
06/02/03	113710	Wheat	Kansas City, MO	Laredo, TX	\$2,180	\$24.03	\$0.65
06/02/03	15507	Wheat	Chicago, IL	Albany, NY	\$1,834	\$20.22	\$0.55
06/02/03	31005	Corn	Minneapolis, MN	Portland, OR	\$3,050	\$33.62	\$0.85
06/02/03	1132.002	Corn	Chicago, IL	Baton Rouge, LA	\$1,845	\$20.34	\$0.52
06/02/03	1132.03	Corn	Council Bluffs, IA	Baton Rouge, LA	\$1,970	\$21.72	\$0.55
06/02/03	113210	Corn	Evansville, IN	Raleigh, NC	\$1,816	\$20.02	\$0.51
06/02/03	1132	Corn	Des Moines, IA	Laredo, TX	\$2,595	\$28.60	\$0.73
06/02/03	61110	Soybean	Minneapolis, MN	Portland, OR	\$3,030	\$33.40	\$0.91
06/02/03	1144	Soybeans	Chicago, IL	Baton Rouge, LA	\$2,736	\$30.16	\$0.82
06/02/03	1144	Soybeans	Council Bluffs, IA	Baton Rouge, LA	\$2,799	\$30.85	\$0.84
06/02/03	1144	Soybeans	Des Moines, IA	Laredo, TX	\$2,864	\$31.57	\$0.86
06/02/03	11441	Soybeans	Evansville, IN	Raleigh, NC	\$1,816	\$20.02	\$0.54

## BARGE TRANSPORTATION

### Illinois River Barge Rate Index - Rate Quotes



The **Illinois River Barge Rate Index** averaged 183% of the Benchmark Tariff Rate between 1999 and 2001, based on weekly market quotes. The **Index**, along with **Rate Quotes** and **Futures Market** bids are indicators of grain transport supply and demand.

Calculating **Barge Rate** Per Ton:  
 $\text{Index} \times 1976 \text{ Tariff Benchmark Rate per Ton}$

Select applicable index from market quotes included in tables on this page. The 1976 benchmark rates per ton are provided in map below.

#### BARGE RATE QUOTES: Southbound Barge Freight

Index=Percent of Tariff, Based on 1976 Tariff Benchmark Rate

	7/2/03	6/25/03	Aug '03	Oct '03
Twin Cities	216	202	210	254
Mid-Mississippi	169	167	173	236
Illinois River	160	157	165	226
St. Louis	108	111	143	202
Lower Ohio	115	113	148	222
Cairo-Memphis	100	102	190	253

Source: Transportation & Marketing /AMS/USDA

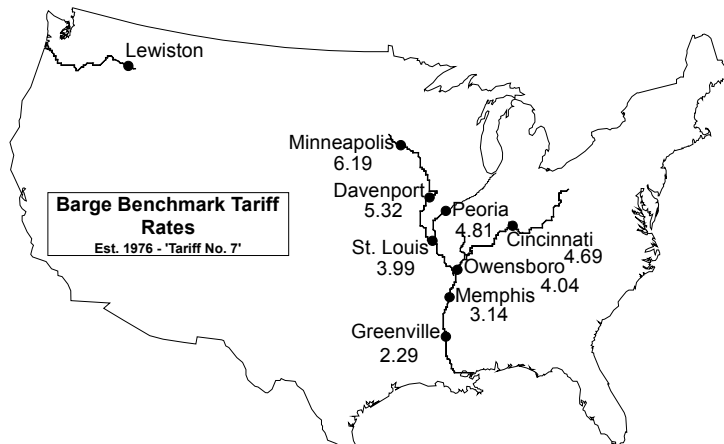
### BARGE FUTURES MARKET

#### Southbound Barge Freight Nominal/Cash Basis Values

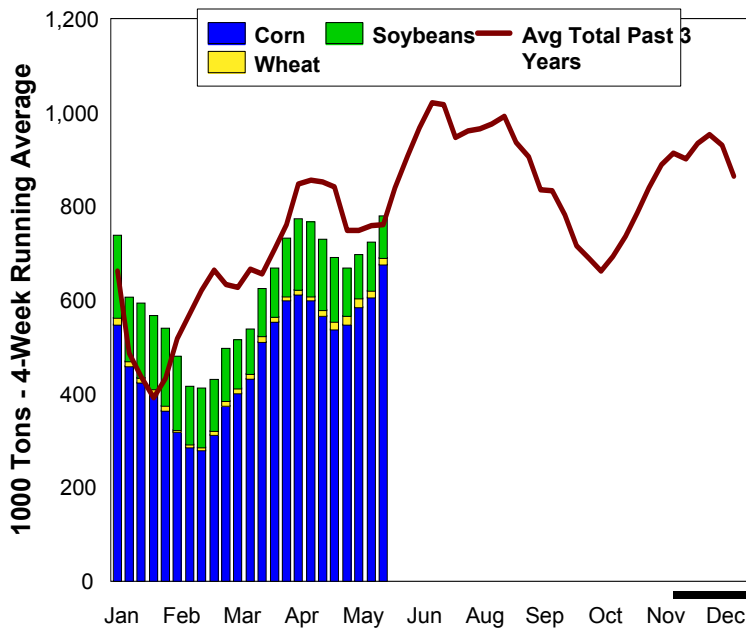
Index=Percent of Tariff, Based on 1976 Tariff Benchmark Rate

Week ended	River/Region	Contract Period	Rate	
			Futures	Cash
7/08/03	St. Louis	Aug	n/a	143
		Oct	n/a	210
		Dec	n/a	135
		Feb	n/a	135
		Mar	n/a	135
	Illinois River	Aug	n/a	165
		Oct	n/a	230
		Dec	n/a	175
		Feb	n/a	185
		Mar	n/a	165

Source: St. Louis Merchants Exchange



## Barge Movements on the Mississippi River (Lock 27)

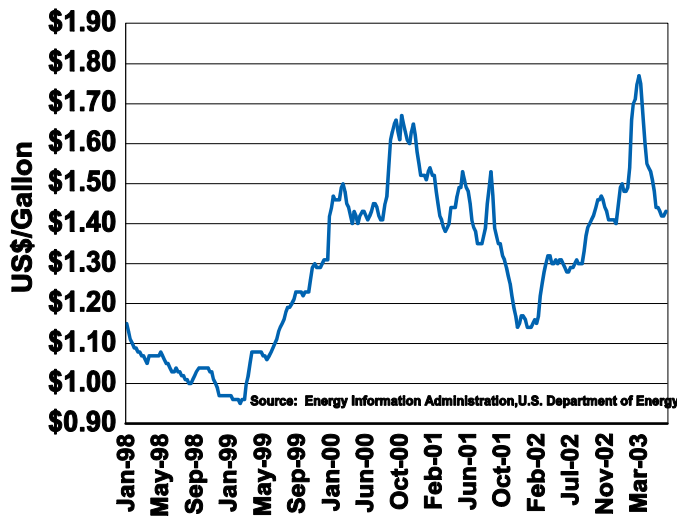
Barge Grain Movements (1,000 Tons)  
for week ending 6/28/03

	Corn	Wht	Sybn	Total
<b>Mississippi River</b>				
Rock Island, IL (L15)	431	15	44	494
Winfield, MO (L25)	604	20	81	709
Alton, IL (L26)	802	26	95	928
Granite City, IL (L27)	789	23	101	918
<b>Illinois River (L8)</b>	176	8	16	200
<b>Ohio River (L52)</b>	11	6	2	18
<b>Arkansas River (L1)</b>	0	3	0	0
2003 YTD	14,444	836	4,450	20,170
2002 YTD	17,521	1,093	5,378	24,567
% of 2002 YTD	82%	77%	83%	82%
Total 2001	31,878	2,679	10,616	47,091

Source: U.S. Army Corp of Engineers,  
YTD and Calendar year total includes Miss/27, Ohio/52 and Ark/1.

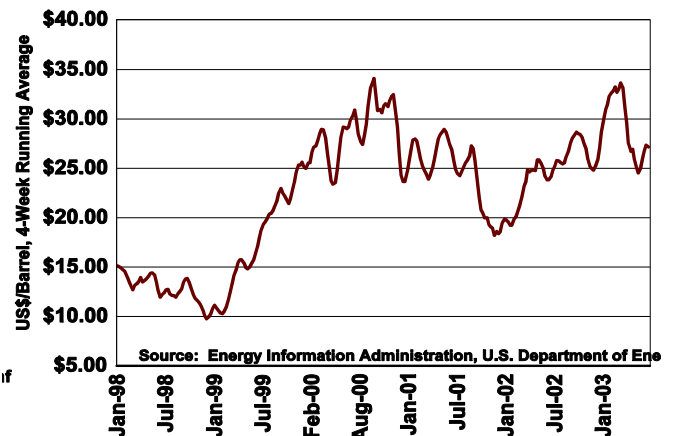
## TRUCK TRANSPORTATION

## Weekly U.S. Retail Road Diesel Price



The weekly **Diesel Price** provides a proxy for trends in U.S. truck rates. Diesel fuel is a significant expense for truck grain movements, accounting for 37% of the estimated variable cost. **Crude Oil Price** is an indicator in future diesel price trends.

## Weekly Brent Crude Price, Friday Close



## Crude Oil Prices (07/08/03)

US\$ per Barrel	This Week	Last Week	
Light Sweet Crude (NYMEX)	29.64	29.72	↓
Brent Crude	27.70	27.93	↓

Note: Light Sweet Crude is exchanged on the New York Mercantile Exchange. North Sea oil has a "benchmark" role in crude oil pricing. Brent crude, a blend of North Sea oils, is traded on the International Petroleum Exchange in London.

Source: [www.eia.doe.gov](http://www.eia.doe.gov); \*U.S. Refiner Crude Acquisition Cost, Composite Domestic & Import

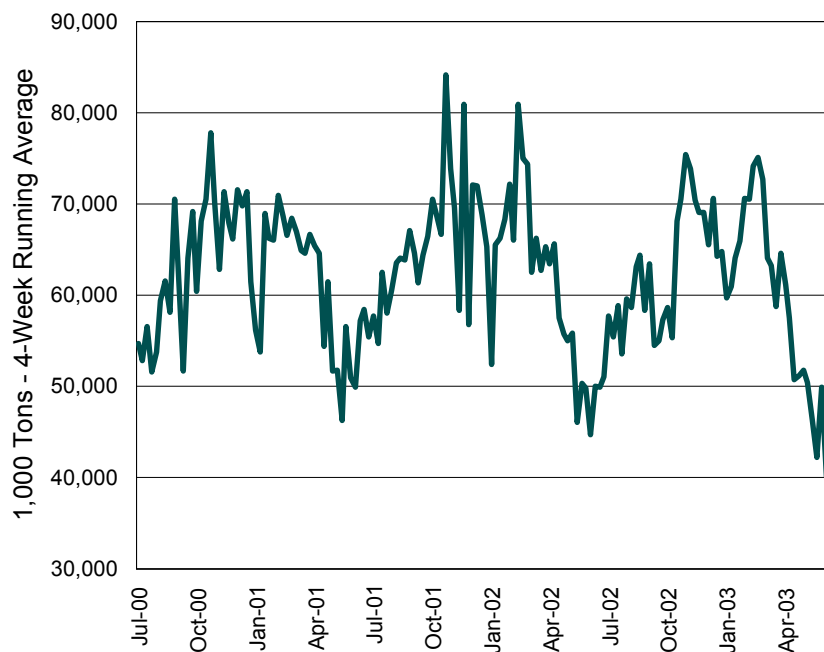
<b>GRAIN EXPORTS</b>
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U.S. Export Balances (1,000 Metric Tons)									
	HRW	SRW	HRS	Wheat SWW	DUR	All	Corn *	Soybean *	Total
06/26/2003	1,793	403	1,317	552	135	4,199	6,063	4,239	14,501
This Week Year Ago	1,137	396	1,043	515	182	3,272	6,623	2,574	12,469
Commulative Exports-Crop Year									
03/04 YTD	610	98	271	196	81	1,255	32,836	26,917	61,008
02/03 YTD	551	226	240	258	32	1,307	38,618	26,916	66,841
01/02 Total	8,761	5,485	5,582	3,175	1,133	24,135	48,003	29,926	102,064
00/01 Total	9,314	4,445	5,775	5,156	1,130	25,819	47,734	27,567	101,120
99/00 Total	10,629	4,195	5,590	4,055	984	25,453	48,760	26,972	101,185
Source: Foreign Agricultural Service YTD-Year-to-Date (www.fas.usda.gov)									

**Select U.S. Port Regions - Grain Inspections for Export (1,000 Metric Tons)**

	Pacific Region			Mississippi Gulf			Texas Gulf			Port Region Total		
	Wheat	Corn	Soybn	Wheat	Corn	Soybn	Wheat	Corn	Soybn	Pacific	Mississippi	Texas
07/03/03	130	0	35	72	569	148	130	0	0	165	789	130
2003 YTD	4,160	2,618	2,557	2,089	14,308	9,545	2,422	529	50	9,335	25,942	3,001
2002 YTD	4,266	2,289	1,321	3,045	19,802	9,646	3,163	138	247	7,876	32,493	3,548
% of 2002 YTD	98%	114%	194%	69%	72%	99%	77%	383%	20%	119%	80%	85%
2002 Total	10,007	5,877	1,639	6,829	34,991	17,996	6,971	468	468	17,523	59,816	7,906

Source: Federal Grain Inspection Service YTD-Year-to-Date

**U.S. Grain Inspected for Export**

**Select Canadian Port Export Inspections**

1,000 Metric Tons, Week End Summary

	Wheat	Durum	Barley
06/19/2003			
Vancouver	105	5	
Prince Rupert			
Prairie Direct	5		
Thunder Bay	18		
St. Lawrence	4,492	2,329	290
2001/02 YTD	10,666	2,963	961
2002/03 YTD	4,620	2,334	290
% of Last Year	43%	79%	30%

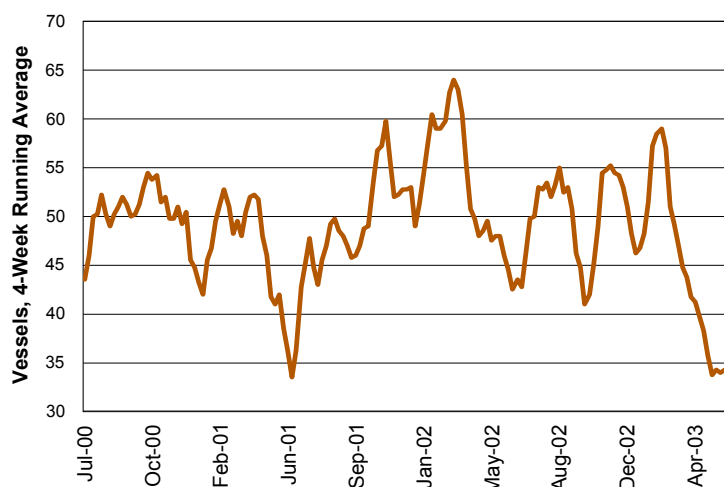
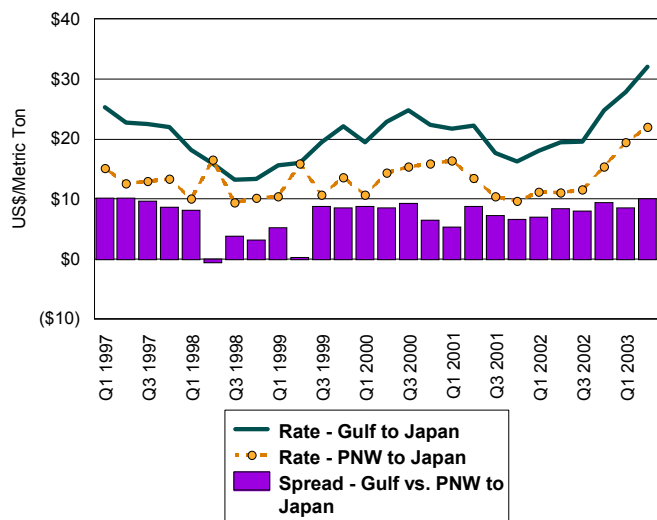
Source: Canadian Grains Commission, Crop Year 8/1-7/31



**Port Region Ocean Grain Vessels**

	Gulf			Pacific Northwest	Vancouver B.C.
	In Port	Loaded 7-Days	Due Next 10-Days	In Port	In Port
06/26/03	28	40	65	3	8
07/03/03	29	40	61	5	7
2002 Range	(15..55)	(33..66)	(44..82)	(3..15)	(0..12)
2002 Avg	35	51	65	8	5

Source: Transportation &amp; Marketing /AMS/ USDA

**Gulf Port Region Grain Vessel Loading Past 7 Days****Grain Vessel Rates to Japan****Quarterly Ocean Freight Rates**

Average Rates &amp; Percentage Changes, U.S. Dollars/Metric Ton

	2003 2 <sup>nd</sup> Qtr	2002 2 <sup>nd</sup> Qtr	% Change		2003 2 <sup>nd</sup> Qtr	2002 2 <sup>nd</sup> Qtr	% Change
<b>Gulf to</b>				<b>Pacific NW to</b>			
Japan	\$31.53	\$19.43	62%	Japan	\$19.33	\$11.03	75%
Mexico	-	\$46.92	-				
N. Europe \$18.98 \$13.58 40%				<b>Argentina/Brazil to</b>			
N. Africa \$21.75 \$15.84 37%				Med. Sea	\$24.50	\$16.98	44%
Med. Sea \$21.88 \$12.62 73%				N. Europe	-	\$17.16	-
				China	\$32.50	-	-

Source: Transportation &amp; Marketing/AMS/USDA

**Ocean Freight Rates for Selected Shipments - week ending 6/28/03**

Export Region	Import Region	Grain	Month	Volume Loaded (Tons)	Freight Rate (\$/Ton)
PNW	Taiwan	Heavy Grains	Jul 10/20	56,000	\$19.50
PNW	Taiwan	Heavy Grains	Jul 10/20	56,000	\$19.50
U.S. Gulf	Laffiteau, Haiti	Wheat	Jul 10/20	9,850	\$60.75*
U.S. Gulf	Japan	Heavy Grain	Jul 1/5	54,000	\$30.00
U.S. Gulf	Japan	Heavy Grain	Jul 25/30	54,000	\$29.40
W. Australia	Sudan	Wheat	Jul 1/10	50,000	\$23.00

Source: Maritime Research Inc.

Rates shown are for metric ton (2,204.62 lbs.=one metric ton), F.O.B., except where otherwise indicated; op=option

\*Most food aid from the United States is required to be shipped on U.S. flag vessels. The vessels are of limited availability resulting in higher rates. In addition, destinations receiving food aid generally lack adequate port unloading facilities, requiring the vessel to remain in port for a longer duration than normal.



CONTAINER

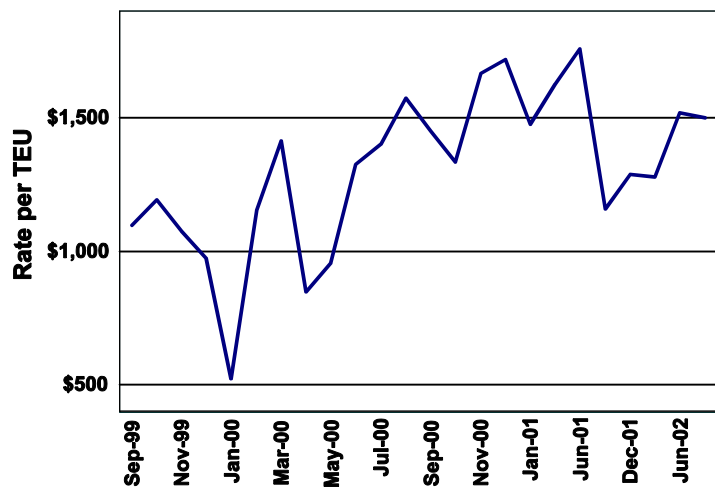
### Container Ocean Freight Rates

Average Rate per TEU, Weighed by Shipping

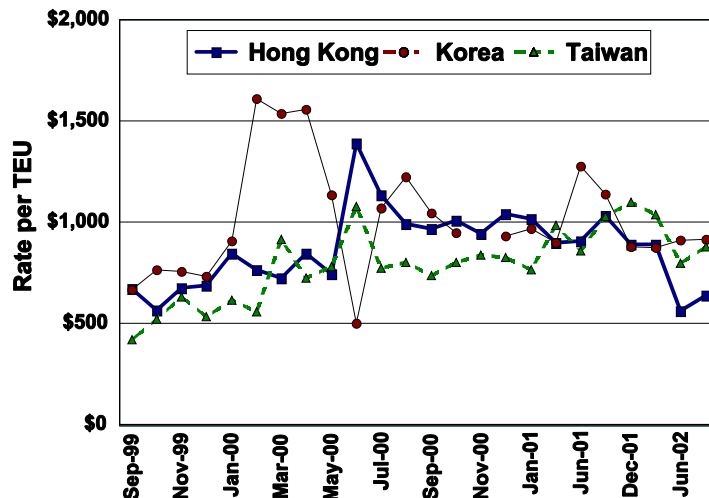
Line Market Share

Source: Transportation &amp; Marketing/AMS/USDA, Quarterly Updates

**Container Rates - Soybeans**  
Seattle, WA Origin to Tokyo, Japan



**Container Rates - Feed Grain**  
Seattle, WA Origin to Selected Destinations



Approximately 420,000 MT of grain and oilseed exports were marketed via container in 2001. This volume increased 26% compared to 1997.